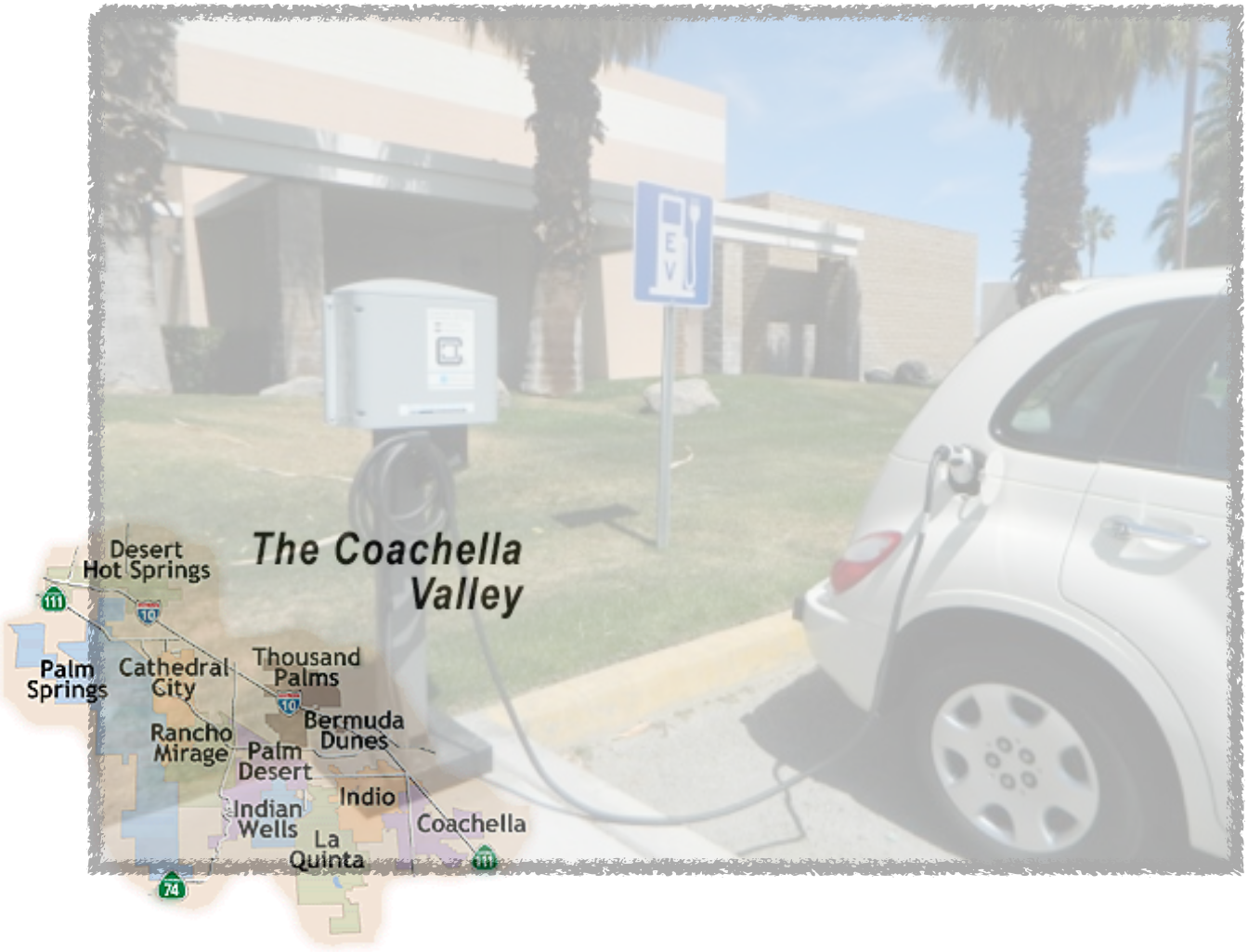
Clean Cities Coachella Valley Region: Community Readiness & planning For Electric Vehicle & Charging Infrastructure Project

Clean Cities Coachella Valley Region



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C3VR, Inc.

Overview of Coachella Valley Region and Electric Vehicle Implementation

About Clean Cities Coachella Valley Region (C3VR, Inc.)

Clean Cities Coachella Valley Region (C3VR) leads a local geographically-based coalition composed of local fleets, fuel providers, and policymakers that focus on two united goals: petroleum and greenhouse gas reduction. Clean Cities role in the Coachella Valley is to achieve an overall reduction in mobile source emissions and reduce the amount of fossil fuel used in vehicles. A sustainable transportation program will help to minimize environmental damage from vehicles, increase energy security, and meet our various transportation needs.

C3VR has a long history of enacting, implementing and improving upon the goals established in 1996 when the Coalition received its first designation from the U.S. Department of Energy (DOE).

The Coachella Valley Region

The Coachella Valley is located in the South Coast Air Basin. C3VR's jurisdictional boundaries include the County of Riverside, the Cities of Cathedral City, Coachella, Desert Hot Springs, Indian Wells, Indio, La Quinta, Palm Desert, Palm Springs, Rancho Mirage, and surrounding desert communities. As an area with toxic air pollutant concerns, the Coachella Valley has developed a program to ensure that it maintains stringent National Ambient Air Quality Standards for particulate matter (PM10, 2.5) and ozone. With a population of over 400,000, C3VR is committed to programs that will clean the air and protect public health.

Why Electric Vehicles

Most of the automobile manufacturers are currently producing Electric Vehicles (EVs) or Plug-in Hybrid Electric Vehicles (PHEVs). Electric vehicles produce no tailpipe emissions and, when charged using electricity generated from renewable resources, there are virtually no greenhouse gas emissions. With the implementation of a Smart Grid, electric vehicles can also provide a dispatchable source of electricity that can help utilities maintain reliable service during peak demand.

Fuel Economy Standards announced by President Obama, mandate 30% reduction in carbon emission by 2016 for corporations. He also has set a goal for putting 1 million electric cars on the road by 2015 and vowed to secure funding to achieve it. EVs are beneficial to the environment in terms of lower emissions, but also provide dramatic fuel economy savings to consumers already dealing with the high price of fuel at the pumps. It is estimated that the auto industry is responsible for roughly 15% of global carbon emissions, equating to approximately eight billion metric tons per year.

In order to have communities ready for Electric Vehicles (EVs), charging stations must be in place. With these stations in place consumers will be more inclined to purchase plug-in electric vehicles. Clean Cities Coachella Valley is working with stakeholders to educate the public on electric vehicles and charging infrastructure. Continued support for both the public and private sector will be needed to assist in the development of EV technology and increase consumer appeal.

California Air Resources Board (CARB) approved regulations that require car manufacturers to cut smog emissions from new vehicles by 75% by 2025 and reduce greenhouse gasses by 34%. To meet these goals, the number of plug-in battery electric vehicles in California is expected to double from current levels by 2013 and will reach 460,000 by 2020.

Electric Vehicles

Hybrid electric vehicles (HEVs) are powered by an internal combustion engine or other propulsion source that can be run on conventional or alternative fuel and an electric motor that uses energy stored in a battery. HEVs combine the benefits of high fuel economy and low emissions with the power and range of conventional vehicles.

Plug-In Hybrid Electric Vehicles PHEVs are powered by an internal combustion engine that can run on conventional or alternative fuel and an electric motor that uses energy stored in a battery. The vehicle can be plugged into an electric power source to charge the battery. PHEVs are sometimes called extended range electric vehicles (EREVs).

All Electric Vehicles (EVs), sometimes called Battery Electric Vehicles(BEV) or Plug-in Electric vehicles (PEV), use a battery to store the electric energy that powers the motor. EV batteries are charged by plugging the vehicle into an electric power source. Range 80 to 120 miles.

Neighborhood Electric Vehicles (NEV) are vehicles that are capable of traveling at a low speed. NEVs are designed to be used in residential areas with low density traffic and low speed zones. They are only legally permitted on road with a posted speed limit of 35mph or lower.

Batteries for Hybrid and Plug-In Electric Vehicles

Energy storage systems, usually batteries, are essential for electric drive vehicles, such as hybrid electric vehicles (HEVs), plug- in hybrid electric vehicles (PHEVs), and all-electric vehicles (EVs). Batteries must have a high energy-storage capacity per unit weight and per unit cost. Because the battery is the most expensive component in most electric drive systems, reducing the cost of the battery is crucial to producing affordable electric drive vehicles.

Charging Stations

Clean Cities Helps Establish PEV Charging Stations

Establishing plug-in electric vehicle (PEV) charging stations requires unique knowledge and skills.If you need help, contact your local Clean Cities coordinator.Clean Cities is the U.S.Department of Energy's flagship alternative-transportation deployment initiative.It is supported by a diverse and capable team of stakeholders from private companies, utilities, government agencies, vehicle manufacturers, national laboratories, and other transportation-related organizations.These stakeholders, organized into nearly 100 Clean Cities coalitions nationwide, are ready to help with specific charging station challenges.Contact your local coordinator by visiting the Clean Cities website at *www.cleancities.energy.gov*.

C3VR identifies key decision makers in each of the nine cities in the Coachella Valley Region, to identify locations for installing public EV chargers. Areas to look at are the work place, Multi-unit dwelling, publicly owned streets, shopping centers, libraries and garages. Preparation in planning, permitting, charging, emergency response and ownership and repairs are crucial to the success of this deployment. Consumer needs must be discussed before decisions are made. Some questions that are always asked: Where to put charging stations? How many units? who is going to pay for it and maintain it?

Because Battery Electric Vehicles have a limited driving range, a network of charging stations must be installed to support these vehicles. Most EV consumers charge their vehicles overnight at home when the wide demand for electricity is low. Clean Cities Community Readiness and Planning for Plug-in Electric Vehicles and Infrastructure, involves planning and policy activities for successful deployment and implementation of plug-in electric drive vehicles. The focus is to determine the best practices for Electric Vehicle deployment, streamlining permitting process, and location of Electric Vehicles infrastructure.

An EV charging station supplies electricity to recharge electric or plug-in hybrid vehicles at voltages and currents that minimizes the charging time.

Most EV and PHEV owners will charge their vehicles overnight at home. For this reason, Level 1 (120 volts) and Level 2 (240 volts) charging equipment will be the primary options for homeowners. Currently available Level 2 charging equipment costs between $500 and $7,000 (installed) before a federal tax credit (of up to $1,000) and potential state incentives.

Installation contractors can inform homeowners if their home has adequate electrical capacity for vehicle charging. Most people will prefer Level 2 equipment for faster charging, but older homes might have insufficient electric capacity. Homeowners can add circuits to accommodate the capacity needed for Level 2 charging.

EVSE installations must comply with local, state, and national codes and regulations, and installation requires permitting licensed contractors. Contractors should check with the local planning department before installing equipment. Homeowners should consult EV and PHEV manufacturer guidance for information about the required charging equipment and find out the specifica-

tions before purchasing equipment and electric services. Public charging infrastructure locations: shopping Centers, city parking lots, airports, hotels, and office buildings.

Charging equipment, or Electric Vehicle Supply Equipment (EVSE), for PHEVs and EVs is classified by the maximum amount of power provided to the battery. Charging times range from 30 minutes to 20 hours, depending on how depleted the battery is, the type of battery and the type of charging equipment. Most EVSE will be available in locations where vehicles park for extended periods, including residences, workplaces, and parking garages.

Level 1: Level 1 equipment provides charging through a 120 volt (V), alternating- current (AC) plug. Vehicles will gain 2-5 miles of range for each hour of charging. Level 1 charging is used for residential charging.

Level 2: Level 2 equipment offers charging through a 240V, AC plug. Most homes have 240V service available. Vehicles gain 10-20 miles of range per hour of charging. Level 2 is used for residential and public charging.

Level 3 (in development): Level 3 equipment is still in development. It will operate at a higher voltage and current than Level 2. Reaching a full charge could take less than 30 minutes. Level 3 is for public charging.

DC Fast Charging: Direct-current (DC) fast charging equipment (208-600V) provides 50-150 kW to the battery. This option enables charging along heavy traffic corridors and at public stations. Vehicles gain 60-80 miles of range in less than 30 minutes of charging.

Inductive Charging: Inductive charging equipment installed for EVs in the early 1990s is still being used in certain areas. Some companies are working on inductive charging options for future EVs.

Places for charging stations

Non-Residential	Single Family	Multi-Family Housing
Workplace	Residential Garage	Apartment Building
Long-Term	Carport/Driveway	Condominiums and Townhouses
Public: Parking Decks etc.	On-Street	On-Street
Retail: Shopping centers etc.		
On-Street		
Private or Public Fleet Facility		

Objective for this project

Assess institutional readiness for the Southern California PEV Readiness Study through survey questions and follow-up workshops.

Goals

In support of the Southern California Plug-In Electric Vehicle Readiness Study, Clean Cities Coalitions will provide outreach services to gather data and summarize findings in support of a regional plan to prepare Southern California for the deployment of electric vehicles.

Task 1

Provide input to and help distribute a survey in order to gauge institutional readiness (i.e. building codes, construction permitting or inspection processes, zoning, and parking standards).

The Cities of Coachella Valley Region and Electric Vehicle Readiness

City of Palm Springs

The City of Palm Springs has transformed itself into the hippest resort destination in Southern California. With a host of innovative community and economic development projects, incentive programs, multi-million dollar hotels, special events and tourist attractions, Palm Springs is enjoying being the hippest destination in Southern California.The city has a population of 45,279 and average income $61,949. (California's Coachella Valley Vision 2012-2013 Climate for Success (CCV Vision))

The City has been working on readiness for electric vehicles for a number of years. Today they have over twelve public and three private charging stations. For the pass three years the City of Palm Springs partnered with Clean Cities Coachella Valley in putting on successful Community Electric Vehicles Fairs and Odyssey events. The City's fleet now has a Nissan Leaf added to it. Palm Springs Enterprise Rental by the Palm Springs International Airport rents electric vehicles. Palm Springs has received funding for installation of charging stations from the re-connect program.

Electric Vehicle Readiness stats:

Building Codes	California electric codes and standards are followed.
Constructing permitting	Steps to install Charging station: This can be completed over the counter. 1.Fill out application for building permit - Minor Architectural Application. application at Planning Department counter. one week approval business or same day approval for residential. Building permit is $127 2.Provide a site plan showing the location of the charger. 3.Must have a licensed electrician - CA electric codes are followed and you need an electrical permit.
Inspection	After request for inspection it takes the city 1 day to inspect installation.
Zoning	No specifics for Electric Charging Station
Parking	Electric Vehicle Parking space is for electric vehicles only - sign is in front of parking space

Cathedral City:

Cathedral City is fast becoming the Coachella Valley's center for distinctive activities - from European kart driving and an olympic ice skating training facility to a growing antique and consignment district. A population of 51,952 and an average income of $61,519. (CCV Vision)

Electric Vehicle Readiness stats:

Building Codes	California electric codes and standards are followed. The Building Department issues building permits, performs plan checks and does inspections on all building construction, additions and alterations to assure compliance with current Building Codes, Riverside County ordinances and State and Federal laws.
Constructing permitting	The City does not have a separate permit for Electric Vehicle Infrastructure Steps to install Charging station uses existing permits: This can be completed over the counter. 1. Application 2. Diagram of where it will be installed 3. A licensed Electrician is required Fees are site specific and based on total cost of the project
Inspection	Inspection is within 24 hours after request. If received before 6:30am inspection will be same day. Inspection Hours: Monday - Thursday - 7:30 am - 3:00pm Inspection Phone: 760-770-0341
Zoning	Planning Department - No specifics for Electric Charging Station
Parking	Planning Department - No specifics for Electric Charging Station

City of Coachella

Small-Town atmosphere, Big-City Advantages. It is one of the oldest incorporated cities in the valley, Coachella is a city of youth, with a median age of 26. More than 150 teams play league soccer at Bagdouma Park. That energy is what drives policy makers to reinvest in the community with new parks and public facilities, as well as develop the commercial and retail core to keep tax revenues in the city and provide residents with more choices. A population of 41,904 and average household income $45,309. (CCV Vision)

Electric Vehicle Readiness stats:

Building Codes	The city has no specific guidelines for Electric Vehicle Charging Station. Guidelines followed for California building codes and Electric codes.
Constructing permitting	The city does not have a separate permit for Electric Vehicle Charging Station. They have no policy that recognizes EV charging station installation.
Inspection	
Zoning	Planning Department - No specifics for Electric Charging Station.
Parking	They do not have any policy that recognizes this. Not much to offer. If policies were in development maybe would recognize this.

City of Desert Hot Springs

Desert Hot Springs is built over one of the world's finest natural hot mineral water aquifers. Its drinking water has won numerous international awards. It is a world-class health and wellness destination. It was California's fastest-growing city in 2011, yet it retains a small-town, friendly atmosphere. The city's environmental amenities, attractive housing prices, business and development opportunities, and exceptional views have spurred its steady expansion. The population grew by 53% between 2000 and 2010, with a population of 27,638 and average household income $40,675. (CCC Vision)

Electric Vehicle Readiness stats:

Building Codes	Guidelines followed for California building codes and Electric codes. The city does not have separate permit for Electric Vehicle Infrastructure.
Constructing permitting	The city does not have a separate permit for Electric Vehicle Charging Station permit.
Inspection	Inspection 24 hours after request
Zoning	Planning Department - No specifics for Electric Charging Station
Parking	The city does not have a parking policy for Electric Vehicle

City of Indian Wells

This is a community where caring, concerned, and involved residents play an active role in ensuring that Indian Wells maintains the highest quality of life possible. The city government embraces innovation, transparency, environmental responsibility, and economic sustainability; extraordinary amenities for residents and visitors, like the Indian Wells Golf Resort and Indian Wells Tennis Garden; four luxury hotels and premier cultural offerings; and a stimulating business environment ripe for retail and commercial enterprises, telecommuting executives, and entrepreneurs. With a population of 5,035 and average household income $127,770. (CCC Vision)

Electric Vehicle Readiness stats:

Building Codes	Guidelines followed for California building codes and Electric codes. They do not have a separate permit for Electric Vehicle Infrastructure. California building codes are followed. The City does not provide over the counter plan check. The plan is checked by city staff. Typically takes 2 months for processing.
Constructing permitting	Separate permit for Electric Vehicle Infrastructure is not required. Permit cost: 3 to 5% of the construction value. Two payments are required, an initial payment for plan check and a second payment for the building permit.
Inspection	760-834-7790, call for inspection. Hotline Inquiries call: 760-776-0230
Zoning	Planning Department - No specifics for Electric Charging Station
Parking	The city does not have a parking policy for Electric Vehicle

City of Indio

Close to 200 new businesses, both national and international in scope, have established themselves within city limits in the last year, alone. Many of these are well-known retail outlets attracting countless shoppers to the area. Increased consumer confidence has caused sales tax income to grow to the point where percentage-wise, it is positioning Indio as a retail hub. Some of this boost can be attributed to the many events Indio is most happy to accommodate, reveling in its identify as the City of Festivals. The pre-eminent Coachella and Stagecoach music festivals attract hundreds of thousands of fans from both near and far. With a population of 78,065 and average household income $59,989. (CCC Vision)

Electric Vehicle Readiness stats:

Building Codes	Guidelines followed for California building codes and Electrical codes. The city does not have separate permit for Electric Vehicle Infrastructure.
Constructing permitting	To install EV chargers, this would fall-under the California electric code standards. You can apply for permits at the counter. For EV charging equipment installation an electric permit. Permit cost is required. under $100 Same day permits are available at the counter for single family dwellings and 3-5 weeks for commercial/multifamily, open parking lot and street parking.
Inspection	Inspection is within 24 hours of request. This can be made by telephone, at the counter or by Fax.
Zoning	Planning Department - No specifics for Electric Charging Station
Parking	The city does not have a parking policy for Electric Vehicle
Contact information	

City of La Quinta

The groundwork, especially in and around LaQuinta Village, has been laid; and the city has an opportunity to embrace a comprehensive health and wellness initiative reflecting the elements that have become the cornerstone of its stature and popularity. As a HEAL city, LaQuinta is committed to encourage physical activity, healthy foods, and the infrastructure to support them. With a population of 38,075 and average household income $93,091. (CCC Vision)

Electric Vehicle Readiness stats:

Building Codes	Guidelines followed for California building codes and Electric codes. Separate permit for Electric Vehicle Infrastructure is not required at this time They will not enforced unless it comes from the state.
Constructing permitting	The city does not have separate permit for Electric Vehicle Infrastructure.
Inspection	Within 24 hours of request
Zoning	Planning Department - No specifics for Electric Charging Station

Parking	They have nothing in place that mandates this.

City of Palm Desert

A thriving retail, cultural, and educational center. Business activity fuels public services in Palm Desert, and the community continues to experience dynamic commercial development, despite a challenging economic climate. During the last year, Palm Desert has witnessed the opening of a wide variety of nationally known stores, including trendsetting active apparel retailers. The upward trend in retail stores shows no signs of slowing, with recent announcements by Whole Foods and Nordstrom Rack that will open locations in Palm Desert in 2014. With a population of 49,471 and average household income $82,418. (CCC Vision)

Electric Vehicle Readiness stats:

Building Codes	Guidelines followed for California building codes and Electric codes. The city does not have separate permit for Electric Vehicle Infrastructure.
Constructing permitting	Permit fee $105.00 FEES Plan Check Hourly: $168 Inspection Hourly: $159 Fees are for reference only, depending on what is done. Palm Desert offers a one stop option for help with development projects, building plans, answers to inspection questions as well as on the spot permitting for a variety of projects. Steps to get permit: 1. Contact Freddie Riddle in the Energy department to get acceptance for this project. 2. Upon approval of the project complete required paperworks which includes: a site plan, floor plan, clearance around unit, load calculations & manufacturer specifications. Take forms to the permitting counter. If all documents are in order permit will be given at that time. You will also get a card with the guidelines for requesting an inspection.
Inspection	Inspection request can be called in or come in to the counter to request it. Inspection are completed within 24hours of request. Permit will be given to the legal property owner or a licensed electrician Estimation of fees: If the evaluation of cost is $1,500.00 : Residential $306 Commercial: plan check $203 + Permit $306 = $506 * this is an estimate
Zoning	Planning Department - No specifics for Electric Charging Station
Parking	Electric Vehicle parking space is for EV charging only. Vehicle that are not electric cannot park in these spaces - this is an assigned parking space and the signs must be followed.

City of Rancho Mirage

Rancho Mirage has always been a luxury desert enclave cherished by U.S. Presidents, Hollywood celebrities, and corporate executives. Dining establishments appealing to every appetite abound along the city's famed Restaurant Row and at The River in Rancho Mirage. Tennis, golf, and spa enthusiasts take special delight in the wealth of options available, weather in a private country club setting or at a world-class resort, including the much anticipated opening of the Ritz-Carlton Rancho Mirage. With a population of 17,504 and average household income of $109,248. (CCC Vision)

Electric Vehicle Readiness stats:

Building Codes	Guidelines followed for California building codes and Electric codes. The city does not have separate permit for Electric Vehicle Infrastructure.
Constructing permitting	The city does not have a specific fee for permits for charging station
Inspection	Inspection is completed 24 hours after request
Zoning	Planning Department - No specifics for Electric Charging Station
Parking	The city does not have a parking policy for Electric Vehicle

Task 2

Facilitate at least two workshops in each coalition territory directed toward local governments, public and private fleets, auto dealerships, equipment manufacturers, energy marketers, utilities/ energy companies, and/or transportation authorities to gather data.

Workshop #1

The California Electric Vehicle Codes and Standards Seminar
July 17, 2012 at the College of the Desert.
Flyer and Agenda

Clean Cities Coachella Valley Region (C3VR)

The California Electric Vehicle Codes and Standards Seminar

Agenda for July 17, 2012, College of the Desert, Palm Desert, CA

7:30 am: Continental Breakfast and Test Drive Sign-ups

8:00 am: Seminar Welcome and Introductions (Suzanne Seivright)

8:15 am: Intro to EV Infrastructure Training and Instructors (Bernie Kotlier)

8:45 am: EV Codes and Standards (Jim Hegarty)

10:15 am: Break and Test Drive Sign-ups

10:30 am: Site Assessments, Load Calculations, and Safety (Jim Hegarty)

11:45 am: Lunch and Test Drives

12:40 pm: EV Permitting (Alex Keros, CA PEV Collaborative / General Motors)

1:10 pm: Intro to Utility Notification (Bernie Kotlier)

1:15 pm: Utility Presentation, Southern California Edison (Vickie Pruitt)

2:00 pm: Break and More Test Drives

2:25 pm: SCAQMD Video, *The Right to Breathe* (Intro by Suzanne Seivright)

2:45 pm: GM Presentation

3:05 pm: Toyota Presentation

3:25 pm: Coda Presentation

3:45 – 4:45 pm: More Test Drives

Notes on workshop:

Clean Cities Coachella Valley Region(C3VR) in partnership with national Electric Vehicle Infrastructure Training Program (EVITP), hosted a full day training seminar 'California Electric Vehicle Codes and Standards for Residential, Commercial, Public, and Private industries'. It was developed for government officials, city managers, and inspectors; utility staff; contractors; facility managers; private and public fleet managers; and other EV industry related stakeholders. The seminar was instructed by an expert EVITP Certified Master Instructor. It was conducted July 17, 2012 at the College of the Desert (COD) in Palm Desert, California, from 8am to 4pm.

EVITP provides training for people installing electric vehicle supply equipment (EVSE). As a voluntary collaboration of electric industry organization, EVITP supports developing electric vehicle charging infrastructure for residential and commercial markets. This training teaches industry best practices in electric-vehicle infrastructure installation, commissioning and maintenance.

25 participants signed in

Speakers:

- Bernie Kotlier: National Co-chair, Electric Vehicle Infrastructure Training Program (EVITP)
  Presentation: EV Infrastructure Training and Instructions and Intro to Utility Notification

- Jim Hegarty, Electric Vehicle Infrastructure Training Program Certified Master Instructor
  Presentation: EV Codes and Standards and Site Calculations, Load Calculations, and Safety
- Alex Keros, CA PEV Collaborative / General Motors Infrastructure Planning, Senior Engineer Electric & Hydrogen Infrastructure -
  Presentation: EV Permitting and Presentation on Toyota

- Vickie Pruitt, Sr. Project Manager, Tariff Programs & Services - Plug-in Electric Vehicle Operations support, Southern California Edison -
  Presentation: Utility support

- Gremlin Yoza, Toyota Motor Sales, National Business Manager
  Presentation on Toyota

- Georgia Seivright, Clean Cities Co-coordinator & Program Manager.
  Presentation on Clean Cities initiatives - also, resource table filled with pertinent documents for attendees.

Display vendors:
Desert Electric Supply - available charging stations (EATON, SEAMINESS, LEVITY, ver-green, Pass & Seymour, AV aerovironment…), AQMD, C3VR, Sema Connect Charge Network, Energy Consultant - MSN, Clayton Hermosa

Vehicles available for test drive
- Toyota, Coda, GM, Nissan, Tesla

Workshop #2
Regional Planning for Plug-in Electric Vehicle (PEV) & Charging infrastructure
Workshop - February 21, 2013 in Palm Springs

Poster and Agenda

Electric Drive Community Readiness Workshop - Regional Planning
Thursday, February 21, 2013
Palm Springs CA

Time	Event	Presenter
9:00 a.m.	Welcome	Georgia Seivright Program Manager Clean Cities Coachella Valley Region (C3VR)
9:05	NAFTC PRT ElectricDrive - Clean Cities Learning Program	YouTube - Clean Cities Video
9:15	Federal and State Incentives and Fundings for plug-in electric vehicles	Philip Sheehy, Phd (ICF International)
9:30	City of Palm Springs	Michele Mician Manager, Office of Sustainability City of Palm Springs
9:45	EVSE Permitting and Inspection Best Practices: CA Plug-In Electric Vehicle Collaborative	Bernie Kotlier National Co-Chair EVITP
10:15	Coachella Valley Association of Governments (CVAG) and the Coachella Valley Plug-In Electric Vehicle (PEV) Readiness Plan Project Team	Michael Shoberg (CVAG) Philip Sheehy, Phd (ICF International)
10:30	Southern California Edison PEV Readiness Initiatives Building Codes and Updates	Beth Neiman Southern California Edison (SCE)
10:50	Helping you get plug-in ready for electric vehicle	Beth Neiman Southern California Edison (SCE)
11:10	Electric Vehicle Codes & Standards Seminar Agenda	Bernie Kotlier National Co-Chair EVITP
11:40	Advanced Transportation Technology Classes / Trainings	Larry McLaughlin Director, ATTE College of the Desert
11:50	Zoning and Parking Rules	Philip Sheehy, Phd (ICF International)
12:05	Ev Conversions / win a converted PT Cruiser	Ben Lizardi Vice President Electric Vehicle Enterprise
12:10	Closing Remarks	Georgia Seivright Program Manager Clean Cities Coachella Valley Region (C3VR)
12:10pm	Lunch and Mingle	

Notes of workshop:

Workshop notes: Workshop was held at the Coachella Valley Economics Partnership (CVEP) Building in Palm Springs. Very diverse group - Electrical Engineer, Planners, Management Analyst, Charging station host, Educators, City Manager… Attendees - 23

Speakers:

- Beth Neiman, Advance Technology Group, PEV Readiness Program - External Engagement. Presented on Electric Codes & Standards and Building Codes Update

- Larry McLaughlin, Director Advanced Transportation Technology and Energy Center, College of the Desert. Presentation on Advanced Transportation Technology Classes / Trainings

- Philip Sheehy, PHD, Technical Specialist, ICF International
  Presentation on Federal & State Incentive and Fundings for Plug-in electric Vehicles and infrastructure, and Zoning and Parking Rules

- Michele Mician, Manager Office of Sustainability, City of Palm Springs
  Presentation on City of Programs - EV Readiness Planning

- Michael Shoberg, CVAG Transportation Manager and Philip Sheehy PhD

Presentation on CVAG EV Readiness Planning for Communities

- Bernie Kotlier, National Co-chair, Electric Vehicle Infrastructure Training Program (EVITP)
  Presentation on EVSE Permitting and Inspection Best Practices and Electric Vehicle Codes & Standards Seminar Agenda

- Ben Lizardi, Vice-President Electric Vehicle Enterprises
  Electric Vehicle Conversions

- Georgia Seivright, Clean Cities Co-coordinator & Program Manager
  Presentation on Clean Cities Resources

Task 3

Provide assessment summary (based on survey and workshops) of the policies and incentives in your territory that can be used as input in the regional guidelines and best practices documentation.

The cities in the Coachella Valley Region do not offer any local incentives for Electric Vehicles and/or Electric Charging Stations.

Last year April 2012, the Coachella Valley Association of Government (CVAG), received a grant of $200,000 from the California Energy Commission (CEC), to help the Coachella Valley develop a plan to prepare for the influx of plug-in electric vehicles beginning in 2014. The plan will study best places to add PEV charging stations, efforts to streamline the permitting, installation and inspection of charging stations, study peoples travel and commute patterns and enlightening consumers on their use and benefits. CVAG has formed a committee The Coachella Valley Plug-in Electric Vehicle Coordinating Council (CVPEVCC) for the planning work. ICF is the consultant that will be preparing the Readiness Plan. CVAG is also forming a technical advisory group to give guidance on the project. This project should be completed by the end of 2013 or early 2014.

On February 9th 2013, the California Center for Sustainability Energy ‘Clean Vehicle Rebate Project’ with the City of Palm Springs, Southern California Edison and Coachella Valley Clean Cities had a free workshop, ‘The Future is Electric Plug In and Get there’ for the community. The workshop was held at the City Hall in Palm Springs. Philip Sheehy from ICF was invited to

speak on CVAG's Plug-in Electric readiness plan and to roll out their PEV community survey. The workshop had over 65 attendees, who were active with questions regarding the readiness for PEV in the area. Six electric vehicle vendors were there with their newest plug-in electric vehicles and local citizens shared their experience of owning an electric vehicle (EV).

CVAG also joined C3VR workshop, on March 21, 2013 to continue promotion of their PEV readiness plan and PEV Survey. Working together with other agencies that are doing similar projects helps, when efforts are not being duplicated.

Consumer barriers and suggested best practices

Objections of consumers for purchasing electric vehicle include, primarily, having the knowledge of the vehicles; the up-front cost of the vehicle, batteries and parts; the range of the vehicle; trained technicians; available charging stations; not on their priority list; cost and time to have charging units installed; and safety.

Suggested Best Practices

Knowledge of vehicles: Community education and outreach activities - this is best when it is combined with other community events. At events, partner with dealerships to raffle a free day with an electric vehicle, this is a plus, and have electric vehicles available at the event for consumers to test drive. Social media - where EV drivers can share their experiences and best practices (Facebook, twitter..). Local one stop EV website. Getting local EV success stories in community printed publications. Start a quarterly Electric Vehicle Committee meeting to gather, share information and success stories, updates of technologies, and best practices. Having electric vehicle charging stations and signage in key areas in the community will attract consumer interest. Request invitation to do presentations at meetings - community, businesses - private or public, chamber of commerce, etc. Poll residents to evaluate the interest level. Let cities and businesses know the resources that are available to them. The PEV Collaborative, Get Ready Charge, Clean Cities, SCAQMD, SCE etc.

Cost of vehicles: To offset the cost of purchasing an electric vehicle, a federal tax credit of up to $7,500 for the purchase of an electric vehicle lowers prices for potential consumers. The State of California along with local governments and car manufacturers also have incentives and benefits to help making the decision easier to purchase these vehicles. See Clean Cities Federal and State Incentives site at http://www.afdc.energy.gov/laws/fed_summary.

Trained technicians: Workforce training and development for skilled workers to build, install, and maintain infrastructure. The College of the Desert offers certificates and an A.S. degree in Advanced Transportation. They offer a 3 unit face-to-face course on Hybrid Electric and Hydrogen vehicles. The primary focus is on hybrids. College of the Desert is a ATTE certified college. Workforce training also includes training for sales personnel at local dealership in order to support Plug-in Electric Vehicle (PEV) sales in the region.

Available charging stations: Having public charging stations at key locations. Cities getting a quick turn around time for processing permits and inspections, local utility involvement and trained electricians will help this process. Local dealership sales teams must be trained and knowledgeable about the vehicles and available charging stations in the area and be a resource to consumers, actively participating in local alternative fuel fairs and activities. Availability of charging infrastructure will decrease barriers to the success of Electric Vehicle deployment. Workplace, commercial and public charging stations will assist consumers as they transition to owning electric vehicles. It is critical that local officials understand the safety implications of vehicles and chargers. They need to become familiar with Electric Vehicles and Charging Infrastructure.

Safety: First Responder Emergency Training classes available for First Responders, educating them on safety measures, if one of these vehicles was in an accident. As preparations get into place for electric vehicles, consumers will be more confident in purchasing them. Classes are available online and through local clean cities coalition and air quality district.

Benefits of purchasing: Reduce air pollution and support new jobs and investment in the state's clean economy, environmental benefits, health, community benefits, save consumers money.

Available Charging Stations

PUBLIC

Palm Springs Public Parking structure downtown Garage.
132 W. Baristo Rd.
Palm Springs. 2 level 2 stations

Fleet Maintenance yard
Palm Springs City Hall.

425 Civic Dr.
Palm Springs
2 level 2 station

Rabobank Building/CVEP
3111 E. Tahquitz Canyon Way,
Palm Springs CA 92263.
2 level 2 stations

Palm Springs Library.
300 S. Sunrise Way,
Palm Springs CA 92263.
1 level 2 station

Palm Springs City Hall,
3200 E. Tahquitz Canyon Way,
Palm Springs, CA 92263.
2 level 2 stations

Palm Springs
Accelerator Park Pedestal,
2901 East Alejo,
Palm Springs CA 92262.
1 level 2 station

Palm Springs International Airport.
3400 E. Tacit Canyon Way
1 level 2 station.

Palm Springs Nissan, 68177 Kyle Rd.
Cathedral City. 1 level 2 charger.
Open during dealership hours
760-328-2828

Jessup Auto Plaza GM, 68-11
East Palm Canyon, 92234.
3 level 2 charging station

Park view Building
73-710 Fred Waring Dr.
Palm Desert CA
2 Charging Stations

PRIVATE

Palm Desert City Hall
4 level 2 station were upgraded with Clipper Creek charging stations.

Palm Desert Regional Hospital -
Two level 2 chargers.

Palm Springs Hilton,
400 E Tahquitz Canyon Way.
760-320-6868
1 level 2 charging station

Marriott - Renaissance Esmeralda
Indian Wells Resort & Spa
44-400 Indian Wells Ln
Indian Wells, CA 92210
760-773-4444
855-443-3873
2 Level 2 charging stations

Best Western Date Tree Hotel
81909 Indio Blvd.
Indio, CA 92201
Level 1

Torre Nissan,
79-125 Highway 111,
La Quinta.
760-777- 8999
1 level 2
Open during dealership hours

JW Marriott Desert Springs Resort & Spa
74-855 Country Club Dr.
Palm Desert, CA 92260
760-341-2211
Level 1 and a Level 2

Notes/future sites for charging stations

*All private charging stations in the Coachella Valley Area are open to the public to use
*There is no cost to use the charging stations

Palm Springs
AQMD to fund 6 future charging stations

10 of the charging stations in Palm Springs was paid for by a $40,000 grant from the states Re-connect California Program.

Palm Springs and C3VR partnered and conducted 3 years of Electric vehicle shows for the community, Odyssey was featured in the 2010 and 2012 events.

The City of Palm Springs has a Nissan Leaf in their fleet that was funded by COLMAC/ AQMD.

Areas for possible charging stations:
- Palm Springs Convention Center
- Palm Springs Cultural Center Farmers market

City of Desert Hot Springs
They are attending the CVAG meetings regarding this.

City of Indian Wells

Possible sites for charging stations:
Eisenhower Medical Center
39-000 Bob Hope Drive,
Rancho Mirage,

Desert Town Hall

The Living Desert Zoo and Garden - 1,800 acre

Indian Wells Tennis Garden - stadium seats 16,000

Indian Wells City Hall

Indian Wells Club - dining and golf resort

City of Indio
The city of Indio does not have charging stations. They are discussing this

City of LaQuinta
The city is ready to start moving forward with readiness plans for EV.

They have just hired Amy McCormick - Business Analyst 760-777-7000
Amy is analyzing what this is all about and will make recommendation to the city manager.

City of Palm Desert
The City will soon be working with other commercial property owners such as the Gardens, Desert Crossing, Westfield, Wal-Mart and other strategic locations to install the newer charging units. This part of the project will obviously take more time, but will soon (hopefully by summer/fall) see electric charging units at several locations throughout the City, so long as they have the cooperation of property owners.

City of Rancho Mirage
Small city.
Pro: No major demand for it in the city. They do have some money to purchase vehicles. They are discussing.
The mayor is pro environment so they are open to moving forward in having cleaner vehicles.

Task 4

Administration of program including, but not limited to, regular coordination meetings and monthly reporting.

Administration work:
C3VR conducted two workshop - July 17, 2013 at the College of the Desert (COD) in Palm Desert, and February 21, 2013 at Coachella Valley Economic Partnership (CVEP) Building in Palm Springs. Work involved solicitation for participants; invited speakers; room set-up; workshop agenda; putting together hand-out's for the workshop; selecting and finalizing workshop location and refreshment and lunch; distribution of individual letters to city officials in the Coachella Valley area; locating key stakeholders in the area and contacting them by telephone calls, email,

mailings, in person communication; Developed and distributed outreach materials, including a survey, developed standard layout for workshop agenda. Develop sign-in sheet for participants. Schedule speakers to fulfill workshop meeting agenda. Compile speaker information into meeting agenda including speaker reports and attachments. Working with dealerships to get vehicles for the events.

Gathering and analyzing local policies. Data obtained includes information on building codes, construction permitting or inspection processes, zoning, and parking rules.

Post on C3VR websites for the general public, distribution of flyers and developed and monitored web related media source invitations. Develop key contact list for the Stakeholder meeting target audience. Host workshop and follow-up with participants.

Completing final documentation of work.

Task 5

Participation in the Southern California PEV Coordinating Council and Statewide PEV Coordinating Council.

Georgia Seivright participated in Southern California PEV Coordinating Council and Statewide PEV Coordinating Council Meetings.

Timeline

2 – 6 months

Deliverables

(1) Survey output
(2) Detailed notes from workshops,
(3) Report with information from each jurisdiction and key stakeholder in the service area
(4) monthly reports

Budget

C3VR: $20,000*; WRCOG: $20,000*
*As currently budgeted, this is all staff work.

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Joe Lim: Planning Manager - 760-541-4255 x4255
jchen@indio.org

LaQuinta
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m-Th. 7:30 - 5:30pm
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INVOICE

Agency:
C3VR, Inc.
3111 Tahquitz Canyon Way
Palm Springs, CA 92262

INVOICE #3312013
DATE: 3/31/2013

TO:
Southern California Council of Governments (SCAG)
818 West Seventh Street, 12th floor
Los Angeles, CA 90017-3435
213-236-1800

Attention: Alfonso Hernandez

PROJECT:
Funding Opportunity Number: Project/OWP # 225.SCG01641.03 Clean Cities Community Readiness & PEVs

Starting date: 6/12/2012 Ending date: 3/31/2013

Description					AMOUNT
All items listed on the below reporting requirements checklist were completed by the Coachella Valley Clean Cities Coalition					
Name:	Hours worked		Rate/Hourly	Cost	
Georgia Seivright	509.60	x	$25	= $12,740.00	$12,740.00
FB Rate:	36.30%	x	20,000	= $7,269.00	$7,260.00
Total Cost: $12,640.00 Total FB: 7,260.00					
				TOTAL Amount Due	$20,000

Georgia Seivright,
C0-coordinator & Program Manager
Clean Cities Coachella Valley Region (C3VR)

Signature: _____

Date: _____